# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
Service Rules for the 698-746, 747-762 and 777-792 MHz Bands	) WT Docket	No. 06-150
Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules	) WT Docket ) )	No. 06-169
Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band	PS Docket N )	No. 06-229
Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010	WT Docket  WT Docket	No. 96-86

To: The Commission

## COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

CTIA – THE WIRELESS ASSOCIATION®

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#### **SUMMARY**

The Commission should promptly adopt straight-forward, market-oriented rules and conduct the 700 MHz auction in accordance with the deadlines set forth in the DTV Transition and Public Safety Act to ensure that the wireless market has the spectrum it needs to continue to innovate and serve more than 235 million mobile wireless subscribers. The wireless industry is not asking that the 700 MHz spectrum be given to it for free, or that the service rules be designed such that only one business model is allowed. Instead, the industry seeks the right to compete at an open auction under fair, non-discriminatory rules so that it can continue the mobility revolution and the broadband evolution.

CTIA limits its comments here to oppose four proposals that threaten to undermine the success of the auction and service deployment in the 700 MHz band: buildout obligations; eligibility restrictions; the Frontline proposal; and "open access" proposals.

**Geographic Buildout.** CTIA shares the Commission's desire for widespread provision of mobile wireless services – but strongly opposes a performance requirement that would impose a geographic buildout mandate.

Wireless carriers are aggressively building in rural areas. In 2006 the Commission found that rural counties have an average of 3.6 mobile competitors – up from 3.3 competitors three years earlier. The Commission also found that 98 percent of the total U.S. population have three or more different mobile wireless operators in the counties in which they live, up from 88 percent in 2000. Market forces, not regulatory edict, prompted carriers to continue to extend out their networks.

Forced uneconomic buildout is unwise. It makes little sense to require five or six licensees to overbuild certain areas according to an arbitrary government timeline where consumer demand may not be able to sustain this number of competitors. Instead, the Commission has the discretion to direct explicit universal service subsidies to facilitate deployment of wireless networks in areas presenting particular economic challenges.

The more appropriate question for the Commission in this proceeding is not whether to impose forced geographic buildout but whether service in rural areas is being denied or unreasonably delayed because entities that want to provide service lack access to spectrum. Today's marketplace has a plethora of spectrum opportunities – cellular, PCS, ESMR, and BRS, as well as the AWS spectrum just auctioned – and the Commission's secondary market rules provide a multitude of ways to access the spectrum. Further, the Commission will soon allow wireless devices to operate on TV "White Spaces." There is no evidence to suggest that access to spectrum is a problem.

Ultimately, a geographic buildout requirement could result in unintended consequences. For example, carriers seeking to retain access to markets could have no choice but to deploy low-cost, lower-grade networks merely to satisfy an arbitrary coverage requirement rather than investment in broadband systems in more targeted areas. Forced buildout, moreover, will force carriers with finite capital expenditure resources to spend on uneconomic deployments rather than enhancing capacity or coverage where subscribers need it most.

**Incumbent Eligibility Restriction.** The Commission should reject proposals to bar any existing provider of DSL service, including rural ILECs, any provider of cable modem service, and any "large" wireless carrier from the 700 MHz auction. Commission precedent makes clear that eligibility restrictions would only be appropriate in a case where there is "significant likelihood of harm to a specific market" – and just the opposite is true here.

The wireless market is flourishing. In 2005, the number of mobile phone subscribers increased from 184.7 million to 213 million, with average minutes of use per subscriber per month rising to 740 minutes in the second half of 2005 from 584 minutes in 2004. Wireless revenue per minute, moreover, fell 22 percent in 2005, from \$0.09 in 2004 to \$0.07 in 2005.

Any suggestion that only a new entrant will deliver wireless broadband as a "third pipe" is completely unfounded. Wireless today <u>is</u> the third pipe, to the person, that the Commission has sought. The Commission's most recent study shows mobile wireless broadband additions *today* driving the growth of high speed lines overall. Specifically, the Commission's report on *High-Speed Services for Internet Access: Status as of June 30, 2006* found that while total broadband lines grew 26 percent from December 2005 to June 2006, almost 60 percent of all new high-speed lines reported during the same period were mobile broadband wireless lines. Today's wireless providers – some affiliated with wireline broadband providers, others not – are investing billions of dollars to deploy next generation broadband wireless networks. These devices serve 235 million American citizens, not exclusively at their office or in their home, but rather wherever they are located when they want broadband access. Ultimately, the public interest is best served by an open auction that ensures that spectrum will be put to its best and highest use.

**Frontline.** The Commission should reject the Frontline plan, which is full of legal risk, policy flaws, and business uncertainties – a plan that, if adopted, would create significant uncertainty for both the commercial and public safety spectrum.

First, the Commission should refrain from dictating business plans. The plan reverts back to "command and control" spectrum policy management with a laundry list of license conditions designed to favor a single entity, Frontline. The combination of conditions – buildout of both the E Block and public safety broadband spectrum, a mandated wholesale business plan, an open access requirement on all licenses held by the

licensee, a wireless *Carterfone* obligation, roaming service – render the prospects of business success a real and open question. Frontline promises benefits that may never be realized because of a questionable business plan – and in doing so jeopardizes auction proceeds already earmarked for worthy projects including public safety interoperability. Frontline, not the FCC and not public safety, should assume the risk of the success or failure of its business model.

Second, the plan's provision to allow the E Block licensee access to the public safety spectrum violates Section 337 of the Communications Act, which prohibits commercially available services in the 700 MHz public safety spectrum.

Finally, the Frontline proposal is not designed primarily to benefit Public Safety. As Frontline officials have said repeatedly in the last few weeks, their proposal, and the attached poison pills, are designed to create a new broadband provider. The framework of the proposal is designed to prevent existing providers from participating at auction for the spectrum. In addition to the poison pills, according to a recent press report, Frontline funded an economic study that concluded that large carriers should not be allowed to participate in the bidding for this auction. All of this activity is designed to ensure that Frontline does not have bidding competition for the spectrum it seeks. Ultimately, should the enterprise fail, the costs of recapturing the spectrum pale in comparison to the uncertainty that would result for the deployment and operations of the public safety broadband network.

**Open Access.** The Commission should reject the proposal to impose an "open access" regime – including "the right of a consumer to use any equipment, content, application or service on a non-discriminatory basis" – on at least 30 MHz of the spectrum to be auctioned.

The proposal is deeply misguided. The record in response to the Skype petition unmistakably shows that exposing wireless networks to untested mobile handsets and applications could degrade network performance, create harmful interference, prevent carrier compliance with important social policy obligations, and open networks to greater security threats.

In any event, consideration of these theories in this proceeding is misplaced. The Commission is entertaining some of these ideas in the Skype proceeding. It has just initiated a notice of inquiry to consider broadband industry practices and the Broadband Policy Statement, and comments are due next month. Any further dialogue is more appropriate in that proceeding than in the 700 MHz context.

The 700 MHz band offers significant opportunities for wireless broadband. Given the importance of this spectrum it would be highly risky to pursue these proposals – geographic buildout; eligibility restrictions; Frontline; and open access – that threaten to undermine the success of the auction and service deployment in the 700 MHz band.

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CTIA – The Wireless Association® ("CTIA") respectfully submits these comments in response to the *Further Notice* issued in the above-captioned proceedings. 

As described below, the Commission should promptly adopt straight-forward, market-oriented rules and conduct the 700 MHz auction in accordance with the deadlines set forth in the Digital Television ("DTV") Transition and Public Safety Act to ensure

<sup>1</sup> Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, et al. Report and Order and Further Notice of Proposed Rulemaking, FCC 07-72 (rel. April 27, 2007) ("Further Notice").

that the wireless market has the spectrum it needs to continue to innovate and serve more than 235 million mobile wireless subscribers.

#### I. INTRODUCTION

The Commission need only look to the immediate past to consider an enormously successful model for conducting a spectrum auction: the Advanced Wireless Service ("AWS") auction held just last year. The AWS auction demonstrates what straight-forward, market-oriented rules can achieve. Under the AWS rules, three providers secured licenses enabling them to achieve nationwide or near-nationwide footprints and numerous other licensees obtained a greater ability to deploy next generation wireless services.

In February 2006, President Bush signed into law the DTV Transition and Public Safety Act, requiring broadcasters to vacate the 700 MHz band by February 17, 2009 and mandating that the Commission conduct an auction for 60 MHz of recovered spectrum no later than January 28, 2008. Since then, however, the environment surrounding the 700 MHz auction has become less clear and more difficult for potential bidders and investors to understand. New proposals are coming almost daily. Certainty is needed now, so that potential bidders understand the auction environment. CTIA believes that the best course of action is to dismiss the myriad proposals on the table to restrict participants or to choose business models and instead move ahead with simple rules that mirror the AWS auction. The AWS auction was an unqualified success – the Commission should model it, not diverge from it. The 700 MHz band offers significant opportunities for wireless

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<sup>&</sup>lt;sup>2</sup> Digital Television Transition and Pubic Safety Act, Pub. L. No. 109-171 (2006).

broadband, and the Commission should strive to create auction and service rules that will promote the continued extensive investment and dynamic innovation that exists in the wireless market today.

As this accelerated rulemaking moves forward, CTIA urges the Commission to keep in mind that wireless service is an enormous consumer success – in large part due to the Commission's market-oriented approach. Here, the wireless industry is not asking that the spectrum be given to it for free, or that the service rules be designed such that only one business model is allowed or only one participant will be interested in bidding. Instead, the industry seeks the right to compete at an open auction under fair, non-discriminatory rules, so that it can continue the mobility revolution and the broadband evolution. If this occurs, American consumers will reap the benefits of new and innovative services, while the U.S. Treasury will see substantial receipts from successful bidders.

CTIA limits its comments here to oppose four proposals that threaten to undermine the success of the auction and service deployment in the 700 MHz Band: buildout obligations; eligibility restrictions; the Frontline proposal; and "open access" proposals.

## II. THE COMMISSION SHOULD NOT ADOPT A GEOGRAPHIC BUILDOUT REQUIREMENT

CTIA shares the Commission's desire for widespread provision of mobile wireless services – but strongly opposes a performance requirement that would impose a geographic buildout mandate, based on arbitrary deadlines that have no basis in the marketplace.

Less than three years ago, the Commission considered the issue of performance requirements in the *Rural Wireless Order* and affirmed the current trend in favor of substantial service. The Commission rejected calls to revert back to geographic- or population-based buildout requirements and instead concluded, "[i]n keeping with our market-oriented policies, we do not propose to require licensees to deploy services where their market studies or other analyses indicate that service would be economically unsustainable." The Commission noted further, "we believe that licensees can provide a meaningful and socially beneficial service without providing ubiquitous service and that providing licensees with sufficient flexibility to respond to market fluctuations will promote the public interest."

In proposing a geographic buildout rule, the *Further Notice* fails to explain why a reversal of current policy is justified. Moreover, it completely ignores *all* arguments and evidence already in WT Docket No. 06-150 opposing a geographic buildout policy.<sup>5</sup>

CTIA submits these additional comments as well.

Wireless Carriers Are Aggressively Extending Their Networks. Wireless carriers are aggressively extending their networks to consumers. The Commission found that "98 percent of the total U.S. population have three or more different operators

<sup>&</sup>lt;sup>3</sup> Facilitating the Provision of Spectrum-Based Service to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Service, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 19078 at 19122 (2004) ("Rural Wireless Report and Order").

<sup>&</sup>lt;sup>4</sup> *Id.* at 19123.

<sup>&</sup>lt;sup>5</sup> See, e.g., Comments of CTIA, WT Docket No. 06-150, at 7-18 (filed Sept. 29, 2006); Verizon Wireless Ex Parte, WT Docket 06-150 (filed Apr. 4, 2007); MetroPCS Communications, Inc. Ex Parte, WT Docket 06-150 (filed Apr. 17, 2007).

(cellular, PCS and/or digital SMR) offering mobile telephone service in the counties in which they live," up from 88 percent in 2000. In September 2006 the Commission also found that rural counties (*i.e.*, counties with 100 or fewer persons per square mile) have an average of 3.6 mobile competitors – up from 3.3 competitors three years earlier. Market forces, not regulatory edict, prompt carriers to continue to extend out their networks. In the *Rural Wireless* proceeding, moreover, the Commission found that its market-oriented policies "have resulted in the widespread provision of wireless services, including in rural areas," and "largely have been successful in promoting facilities-based competition in the rural marketplace, especially with respect to CMRS."

Forced Uneconomic Buildout is Unwise. In his separate statement accompanying the Further Notice, Commissioner Copps reinforced the Commission's earlier view that government should not force licensees to deploy service where it is economically unsustainable. In particular, he stated:

[W]e also need to make sure that we do not unfairly punish licensees—especially in rural areas—who cannot engage in aggressive build-out for perfectly good economic reasons. <sup>10</sup>

<sup>&</sup>lt;sup>6</sup> Eleventh CMRS Competition Report, 21 FCC Rcd at 10964 (citation omitted).

<sup>&</sup>lt;sup>7</sup> See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Fifth Report, 15 FCC Rcd 17660, 17665 (2000).

<sup>&</sup>lt;sup>8</sup> See Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993, Eleventh Report, 21 FCC Rcd 10947, 10982 (2006) (average number of 3.6 competing carriers in rural areas) ("Eleventh CMRS Competition Report"); Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Eighth Report, 18 FCC Rcd 14783, 14836 (2003) (average number of 3.3 competing carriers in rural areas).

<sup>&</sup>lt;sup>9</sup> See Rural Wireless Report and Order, 19 FCC Rcd at 19082 (footnote omitted).

<sup>&</sup>lt;sup>10</sup> Separate Statement of Commissioner Michael J. Copps, Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, et al. Report and Order and Further Notice of Proposed Rulemaking, FCC 07-72 (rel. April 27, 2007).

The notion that every hertz of licensed spectrum must be put into use throughout each licensed area does not make sound economic sense. Rural markets, by their nature, will generate less demand than more populated urban or suburban markets. Thus, it makes little sense to require five or six licensees to overbuild certain areas according to an arbitrary government timeline where consumer demand may not be able to sustain this number of competitors. The Commission's proposal at least seems to acknowledge that geographic build-out obligations make little sense in remote areas where people do not live. The FCC apparently attempts to address this issue by excluding government land, but there are significant private land holdings (*e.g.*, timber and agriculture) where coverage would provide limited consumer benefit. <sup>11</sup>

Universal Service Is a Proven Tool for Encouraging Network Deployment in Rural Areas. The Commission previously has acknowledged "there will be certain rural areas that are very difficult to serve because of high equipment costs, low population density, or other economic factors." Yet a policy of government-imposed, forced investments "not predicated on economic responses to market forces" would result in uneconomic and unsustainable deployment – "potentially stranding capital investment in markets where it is not justified and limiting competitors from fully investing in markets where it is." Requiring carriers to internally subsidize the deployment of networks in less profitable, higher-cost areas with revenues from services provided in more profitable,

<sup>&</sup>lt;sup>11</sup> Further Notice ¶ 213.

<sup>&</sup>lt;sup>12</sup> Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, et al., Notice of Proposed Rulemaking, 21 FCC Rcd 9345, 9362 (2006) (quoting Rural Wireless Report and Order, 19 FCC Rcd at 19089).

<sup>&</sup>lt;sup>13</sup> Comments of Verizon Wireless, WT Docket No. 06-150, at 7-8 (filed Sept. 29, 2006).

lower-cost areas, where carriers are more likely to be subject to competitive pressures, undermines the economically efficient development of competition. For that reason, the kinds of implicit subsidization that forced geographic build-out regulations would require are counter to section 254(e) of the Act.<sup>14</sup>

Where appropriate, the Commission does have discretion to direct explicit universal service subsidies to facilitate deployment of wireless networks in areas presenting particular economic challenges. Indeed, there are numerous examples of universal service being used to extend networks to areas that would be bypassed without access to universal service support. In some cases, wireless carriers have used high-cost universal service support to deliver service to areas that previously had no access to telecommunications – wireless or wireline. These subsidies are particularly helpful to those smaller wireless carriers that are less able to cross-subsidize low-cost and high-cost operations.

A Plethora of Spectrum Opportunities Exist. The question for the Commission in this proceeding is not whether to impose forced buildout but whether service is being denied or unreasonably delayed because entities that want to provide service lack access to spectrum. Indeed, in the Rural Wireless Further Notice the Commission pondered, "if we determine that our current policies are insufficient to increase access to spectrum" it may be necessary to "take additional measures to ensure that unused spectrum moves into

<sup>&</sup>lt;sup>14</sup> See 47 U.S.C. § 254(e); see also COMSAT Corp. v. FCC, 250 F.3d 931, 938-40 (5<sup>th</sup> Cir. 2001) (the Commission can neither require implicit subsidies nor permit them).

<sup>&</sup>lt;sup>15</sup> See, e.g., Written Testimony of Paul W. Garnett, Assistant Vice President, Regulatory Affairs, CTIA-The Wireless Association® Before the United States Senate Committee on Commerce, Science, and Transportation, February 28, 2006, at 11.

the hands of those who stand ready and willing to deploy."<sup>16</sup> Today's marketplace disproves the predicate – there is a multitude of spectrum in rural areas and secondary market mechanisms that provide ways to access it.

Today's marketplace includes spectrum licensed in the cellular, ESMR,

Broadband PCS, and BRS/EBS bands, as well as the AWS-1 spectrum just auctioned. In
addition, the Commission recently decided to allow wireless devices into TV "White
Spaces," and there are numerous existing unlicensed broadband opportunities as well.

Importantly, the Commission has already adopted market-oriented policies designed to ensure that licensed spectrum already in the marketplace can be put to its highest use. As CTIA previously pointed out, in addition to the standard license transfer and assignment authority, the Commission's partitioning and disaggregation policies have proven to be an effective means of ensuring that spectrum already in the marketplace is made accessible to multiple carriers, including those interested in serving rural areas. <sup>17</sup> The Commission's secondary markets spectrum leasing rules provide another market-oriented mechanism to put spectrum into the hands of those who wish to use it.

Indeed, spectrum leasing may be a more attractive mechanism for spectrum holders than partitioning and disaggregation because licensees do not need to permanently divest or relinquish control of their licensed spectrum. By adopting more rigorous performance requirements, on the other hand, the Commission may deny

<sup>&</sup>lt;sup>16</sup> Rural Wireless Further Notice, 19 FCC Rcd at 19156 (emphasis added).

<sup>&</sup>lt;sup>17</sup> See Comments of CTIA, WT Docket No. 06-150, at 12-13.

licensees a reasonable opportunity to engage in market-oriented secondary market business arrangements. Further, there is no evidence to suggest that access to spectrum is a problem or that a return to the command-and-control spectrum regulation of the 1980s is warranted.

A recent proposal by Google seeks to retool the way both spectrum auctions and secondary market rules apply to the 700 MHz spectrum licensees. <sup>18</sup> Google's proposal would result in another round of public comment further delaying this important proceeding. The Commission should not allow the latest in a long line of commenters with requests to continue to delay the 700 MHz auctions, particularly where the Commission's rules already provide for many of the opportunities they seek.

Forced Buildout Will Create Unintended Consequences. Ultimately, a forced geographic buildout requirement, in both urban and rural areas, could result in unintended consequences. For example, carriers seeking to retain access to markets could have no choice but to deploy lower-cost, lower-grade networks merely to satisfy an arbitrary coverage requirement rather than invest in broadband systems in more targeted areas. Forced buildout, moreover, will force carriers with finite capital expenditure resources to spend on uneconomic deployments rather than enhancing capacity or coverage where subscribers need it most. Worse still, a geographic buildout requirement could decrease the likelihood that an area is built out. A provider required to return spectrum for failure

<sup>&</sup>lt;sup>18</sup> Letter to Marlene Dortch, Secretary, Federal Communications Commission from Richard S. Whitt, Washington Telecom and Media Counsel, Google, Inc., WT Docket No. 96-86 (filed May 21, 2007).

to build according to a government imposed timeline may have been the most likely entity to extend into an unserved area. <sup>19</sup>

The Commission Should Retain Substantial Service. The FCC should establish performance requirements similar to, and consistent with, those applicable to the recently-awarded AWS performance requirements. As the Commission concluded in the AWS-1 Report and Order, in comparison to construction requirements the substantial service rules "provide licensees greater flexibility to determine how best to implement their business plans based on criteria demonstrating actual service to end users." The same conclusion should hold with respect to the 700 MHz band licensees.

## III. THE COMMISSION SHOULD REJECT INCUMBENT ELIGIBILITY RESTRICTIONS

The Commission seeks comment on a proposal by Media Access Project and the *Ad Hoc* Public Interest Spectrum Coalition to bar from the 700 MHz auction any provider of DSL service, including rural ILECs, any provider of cable modem service, and any "large" wireless carrier, or to severely restrict their participation. Such sweeping restrictions imposed on wireless and non-wireless companies that already are serving hundreds of millions of Americans – Americans who want access to wireless broadband – would affirmatively harm the public interest and should be rejected.

<sup>19</sup> The Commission's experience with the Part 22 rules for cellular licensees are illustrative on this matter.

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<sup>&</sup>lt;sup>20</sup> See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, Report and Order, 18 FCC Rcd 25162, 25192 (emphasis added).

<sup>&</sup>lt;sup>21</sup> Further Notice ¶ 221.

Notably, imposing eligibility constraints here cannot be squared with the Commission's observation in the *AWS* proceeding:

Eligibility restrictions on licenses may be imposed only when open eligibility would pose a significant likelihood of substantial harm to competition in specific markets and when an eligibility restriction would be effective in eliminating that harm.<sup>22</sup>

There is no evidence of *any* likelihood of substantial harm to competition in specific markets – in fact, just the opposite is true.<sup>23</sup>

The wireless market is flourishing. Competition among facilities-based wireless carriers is fierce with the industry comprised of more than 150 providers. There are currently four carriers that compete nationally for wireless subscribers, five regional carriers and more than 140 carriers that compete in smaller markets. In addition, in the AWS auction, three new carriers acquired the equivalent of nationwide footprints, Leap Wireless, MetroPCS and SpectrumCo. These entities and others battle to serve the more than 235 million U.S. mobile wireless subscribers at a penetration rate of more than 76 percent of the total U.S. population. Moreover, as the number of wireless subscribers and their use of wireless service continues to grow, prices continue to fall. In 2005, the

<sup>&</sup>lt;sup>22</sup> Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz, and 2175-2180 MHz Bands et al., WT Docket No. 04-356, Notice of Proposed Rulemaking, 19 FCC Rcd 19263 at 19291 (2004).

<sup>&</sup>lt;sup>23</sup> See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (agency action must rest on reasoned decision making).

<sup>&</sup>lt;sup>24</sup> CTIA – The Wireless Ass'n, Wireless Quick Facts: Dec. 2006, http://www.ctia.org/advocacy/research/index.cfm/aid/10323 (last visited May 22, 2007). CTIA estimates a 12% increase in U.S. subscribers, from 207.9 million year-end 2005 subscribers to 233 million year-end 2006 subscribers. *See* CTIA – The Wireless Ass'n, Year-End 2006 Estimated Wireless Subscribers Up More Than 25 Million from Dec. 2005, fig."Estimated Subscribers," http://files.ctia.org/pdf/CTIA\_survey\_year\_end\_2006\_graphics.pdf (last visited May 22, 2007).

number of mobile phone subscribers increased from 184.7 million to 213 million, with average minutes of use per subscriber per month rising to 740 minutes in the second half of 2005 from 584 minutes in 2004.<sup>25</sup> Wireless revenue per minute, moreover, fell 22 percent in 2005, from \$0.09 in 2004 to \$0.07 in 2005.<sup>26</sup>

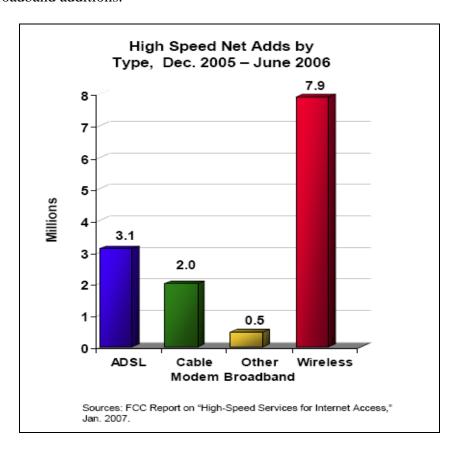
Moreover, any suggestion that only a new entrant will deliver wireless broadband as a "third pipe" is completely unfounded. Wireless carriers are not only delivering a broadband pipe to the home and the office, but unlike the original broadband platforms, wireless is delivering service to the person, wherever they are, when they want it. The Commission's most recent study shows mobile wireless broadband additions *today* driving the growth of high speed lines overall. Specifically, the Commission's report on *High-Speed Services for Internet Access: Status as of June 30, 2006* found that while total broadband lines grew 26 percent from December 2005 to June 2006, almost 60 percent of all new high-speed lines reported during the same period were mobile broadband wireless lines.<sup>27</sup> The following graph illustrates how wireless broadband additions from December 2005 to June 2006 outpace the additions for cable companies

<sup>&</sup>lt;sup>25</sup> Eleventh CMRS Competition Report, 21 FCC Rcd at 10951.

<sup>&</sup>lt;sup>26</sup> *Id.* at Table 10.

<sup>&</sup>lt;sup>27</sup> Industry Analysis and Technology Division: *Wireline Competition Bureau High-Speed Services for Internet Access: Status as of June 30, 2006* at tbls.1, 8 (Jan. 31, 2007) *available at* http://hraunfoss.fcc.gov/edocs\_public/attachmatch/DOC-270128A1.pdf (noting the distribution of broadband subscribers among different technologies (ASDL, SDSL, cable modem, traditional wireline, satellite, fixed wireless, mobile wireless, fiber, and powerline) and calculating a total of 1,323 providers of broadband access).

and traditional telephone companies combined both in total numbers and as a percentage of all broadband additions.<sup>28</sup>



Today's wireless providers – some affiliated with wireline broadband providers, others not – are investing billions of dollars to deploy next generation broadband wireless networks. Wireless carriers are rolling out an array of wireless broadband technologies, including: Evolution – Data Only ("EV-DO"), High Speed Downlink Packet Access ("HSDPA"), Universal Mobile Telecommunications System ("UMTS"), Wideband Code Division Multiple Access ("WCDMA"), Wi-Fi, and Wi-MAX. Collectively, wireless

<sup>&</sup>lt;sup>28</sup> See Federal Trade Commission, Comments of CTIA-The Wireless Association® in re Broadband Connectivity Competition Policy Workshop – Project V0700, at 5 (Feb. 28, 2007) ("CTIA Broadband Connectivity Comments").

companies are providing wireless broadband coverage to more than 235 million

Americans in communities across the country. The following is a snapshot of some of

CTIA's members' high-speed wireless data service offerings:

- <u>Alltel</u>: AxcessSM Broadband service (EV-DO) offers speeds of 400-700 kilobits per second (kbps) with maximum speeds of up to 2.4 Mbps.<sup>29</sup> Alltel's Axcess Broadband service covers more than 44 million pops in over 100 cities.
- AT&T Mobility/Cingular: BroadbandConnect (HSDPA) service offers speeds of 400-700 kbps, and serves virtually all of the top 100 markets. AT&T plans to invest more than \$750 million in 2007 to accelerate its global IP solutions to meet the needs of its business customers worldwide.<sup>30</sup>
- **Sprint Nextel:** Sprint Nextel upgraded its EV-DO service in October 2006 to the EV-DO Revision A ("Rev. A") network, which now reaches more than 193 million people in more than 5,400 communities. Rev. A offers upload speeds of 350-500 kbps, and average download speeds of 600 kbps-1.4 mbps (from 400-700 kbps with EV-DO). Sprint plans to roll-out a Wi-MAX network by the end of 2007. 31
- <u>T-Mobile USA</u>: Offers mobile Internet access through its General Packet Radio Service ("GPRS")/EDGE network and operates a network of more than 8,000 wireless hotspots; T-Mobile is currently spending \$2.7 billion to deploy its HSDPA network.<sup>32</sup>

<sup>&</sup>lt;sup>29</sup> See Press Release, Alltel, Alltel Extends EVDO Wireless Broadband to Myrtle Beach, Hilton Head and Several Inland S.C. Communities (Apr. 12, 2007) available at http://phx.corporate-ir.net/phoenix.zhtml?c=74159&p=irol-newsArticle&ID=984165&highlight=.

<sup>&</sup>lt;sup>30</sup> See Press Release, AT&T, AT&T to Invest \$750 Million-Plus Globally in 2007 to Speed Advanced Solutions to Bus. Customers (Apr. 12, 2007) available at http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=23522.

<sup>&</sup>lt;sup>31</sup> *See* Press Release, Sprint Nextel, Sprint Nextel Announces 4G Wireless Broadband Initiative with Intel, Motorola and Samsung (Aug. 8, 2006) *available at* http://www2.sprint.com/mr/news\_dtl.do?id=12960.

<sup>&</sup>lt;sup>32</sup> See Ken Belson, T-Mobile to Spend \$2.7 Billion to Offer Advanced Services, N.Y. TIMES, Oct. 7, 2006, at C3.

• <u>Verizon Wireless</u>: Based on CDMA EV-DO technology Verizon is offering speeds of 400-700 kbps.<sup>33</sup> In February 2007, Verizon Wireless upgraded to EV-DO Rev. A technology, and now covers more than 145 million consumers. BroadbandAccess customers can expect average download speeds of 600 kbps to 1.4 megabits and average upload speeds of 500-800 kbps.<sup>34</sup>

Deployment of this advanced broadband infrastructure is not limited to nationwide wireless providers. For example, Alaska Communications Systems offers EV-DO-based broadband coverage in Anchorage, Fairbanks, Juneau, Eagle River, and the Mat-Su Valley in Alaska, providing customers with wireless text and picture messaging and wireless broadband Internet access via its ACS Mobile Broadband offering. Cellular South offers EV-DO coverage in Starkville, Mississippi, and along the Mississippi Gulf Coast, giving Cellular South's subscribers in these markets wireless broadband Internet access. Cellular South specifically targeted the Gulf Coast for EV-DO deployment to help with the recovery from Hurricanes Katrina and Rita and in preparation for future natural disasters. Midwest Wireless, Mobile Satellite Ventures, NTELOS, and many others also have deployed mobile wireless broadband services and continue to do so today. 35

<sup>&</sup>lt;sup>33</sup> See Verizon Wireless, Best Wireless Service Provider, http://www.vzw-whoweare.com/best/leadership.asp (last visited May 22, 2007).

<sup>&</sup>lt;sup>34</sup> See id.; FACTS ABOUT...VERIZON WIRELESS NETWORK at <a href="http://news.vzw.com/pdf/Verizon\_Wireless\_Press\_Kit.pdf">http://news.vzw.com/pdf/Verizon\_Wireless\_Press\_Kit.pdf</a> (accessed on May 2, 2007).

<sup>&</sup>lt;sup>35</sup> See, e.g. Ala. Commc'n Sys., ACS Mobile Broadband Internet Anyplace, http://www.acsalaska.com/cultures/en-us/personal/mobile+broadband (last visited May 22, 2007); Cellular S., Wireless Broadband from Cellular S., http://cellularsouth.com/broadband/ (last visited May 22, 2007); Cellular One, Bundle the YAK with the Unlimited Broadband Access, http://www.cellularone.bm/pages/001\_2.php?omenu=m00&menu+m001\_2 (last visited May 22, 2007); Midwest Wireless, High-Speed Internet,

Wireless – and wireless broadband in particular – is a thriving, highly competitive market, and the proposed restrictions would only stifle the investment and innovation that is occurring today and that will serve America tomorrow. Indeed, the proposals run contrary to the fundamental auction principles the Commission has embraced in the past – much to the public's benefit – as the *Further Notice* observed:

[T]he competitive bidding process ensures that spectrum licenses are assigned to those who place the highest value on the resource and will be suited to put the licenses to their most efficient use. Moreover, the Commission has recognized that the public interest is generally served by an auctions process that is open to a variety of applicants. <sup>36</sup>

Further, the Commission should reject a structural separation requirement between the 700 MHz license and a winning bidder's other communications assets. It is unclear what problem the structural safeguards would be intended to address or what would be accomplished in this context – the Commission eliminated such regulation years ago and no proponent has set forth a cogent argument as to why these restrictions should be reintroduced for the 700 MHz band at this point in time.

Ultimately, the public interest is best served by an open auction that ensures that spectrum will be put to its best and highest use. Potential bidders that may be best suited to rapidly and efficiently deploy services using the 700 MHz band – by virtue of their

http://www.midwestwireless.com/home/internetmore/highspeedinternet/default.htm (last visited May 22, 2007); Press Release, Mobile Satellite Ventures, Mobile Satellite Ventures (MSV) Issued Key Patent In Broadband Multi-Spotbeam Satellite Sys. (Oct. 3, 2005) *available at* http://www.msvlp.com/media/press-releases-view.cfm?id=74; NTELOS, Why share your bandwidth with all your neighbors?, http://www.ntelos.com/landline/residential/broadband.html (last visited May 22, 2007); The Online Reporter, Mobile Satellite Ventures to Offer Satellite-based Broadband (Apr. 6, 2007) *available at* http://www.onlinereporter.com/article.php?article id=9207.

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<sup>&</sup>lt;sup>36</sup> Further Notice ¶ 235.

expertise, economies of scope, and existing infrastructure – should not be precluded from participating in the auction. Indeed, given the importance of this spectrum it would be highly risky to limit the pool of potential bidders to entities possessing few if any of these attributes. The Commission should reject the eligibility restriction proposals.

#### IV. THE COMMISSION SHOULD DENY THE FRONTLINE PROPOSAL

Frontline Wireless, LLC ("Frontline") asks the FCC to adopt a far reaching, complex plan full of legal risk, policy flaws, and business uncertainties – a plan that, if adopted, would create significant uncertainty for both the commercial and public safety spectrum. This needless uncertainty would taint not only the proposed "E Block," but would also affect the rest of the auction, including small, medium, and large companies, and, notably, the future of public safety broadband. As CTIA previously observed, the Commission should reject the Frontline proposal.<sup>37</sup>

The Commission Should Refrain from Dictating Business Plans. Spectrum should be used "anyway the auction winners want: no restrictions; no rules; total flexibility." That is a quote from then-FCC Chairman Reed Hundt regarding spectrum assignment and auction policy. 38 Now, the Frontline proposal, championed by Reed Hundt, suggests the opposite approach to assignment – total and complete control, restrictions, no flexibility. The Frontline proposal, moreover, reverts back to "command and control" spectrum policy management with a laundry list of license conditions designed to favor a single entity, Frontline. The Commission should continue its highly

<sup>37</sup> CTIA *Ex Parte*, WT Docket 06-150 (filed Apr. 5, 2007).

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<sup>&</sup>lt;sup>38</sup> "Hundt Outlines 'Seven Commandments' for Telecom Competition", 1996 WL 501856 (F.C.C.), Sept. 6, 1996.

successful policy of licensing commercial spectrum according to a market-oriented, flexible use policy. Frontline, not the FCC, should assume the risk of the success or failure of its business model.

The combination of conditions – buildout of both the E Block and public safety broadband spectrum, a mandated wholesale business plan, an open access requirement on all licenses held by the E Block licensee, a wireless *Carterfone* obligation, roaming service – are designed, it seems, solely to prevent competition at auction for the spectrum that Frontline seeks. Many of these provisions are "poison pills" designed neither to serve public safety, nor to benefit anyone but Frontline. They were arguably designed to run counter to the way that CMRS operators currently run their businesses. Specifically, CTIA believes that the open network/net neutrality and Carterfone provisions are being addressed by the Commission in ongoing proceedings. The wholesale requirement and the roaming requirement too were designed to conflict with current CMRS carriers business models. This command and control, comparative hearing approach, wrapped in a faux auction proposal should be seen for what it is, an attempt to prevent multiple entities from bidding for the spectrum at auction. In addition to the poison pills, according to a recent press report, Frontline funded an economic study that concluded that large carriers should not be allowed to participate in the bidding for this auction. All of this activity is designed to ensure that Frontline does not have bidding competition for the spectrum it seeks.

Frontline's success ultimately is premised on its ability to lease spectrum to commercial providers. These commercial lessees compete with other communications

providers but would be at a significant disadvantage. First, they have no guaranteed access to the spectrum. Further, an open access model is new and novel and will bring with it the risks and costs associated with a new business plan – a plan which the lessees are obligated to follow. Frontline's proposal seeks FCC endorsement of this uncertain business plan.

Additionally, the Frontline plan is not designed with public safety in mind. As Frontline's CEO recently said, "[their proposal] is deeply important because it opens the way for competition and innovation in commercial wireless services...." Moreover, Reed Hundt, Frontline's Vice-Chairman reiterated his company's focus on broadband provision, rather than serving public safety, in a recent television interview, saying "...if we can buy some of that spectrum, then we intend to create a service of wireless broadband that'll jump-start competition in broadband and try to get the United States to stop falling in the world rankings and start climbing back up to the top where we belong." Public safety is left at the mercy of an unknown for-profit entity that has goals for its commercial network that likely differ significantly from public safety's ubiquitous service needs.

The Frontline Plan Violates Section 337. Frontline proposes that the Commission allow the "E Block" licensee exclusive access to lease 12 MHz of public safety spectrum. This proposal contravenes Section 337 of the Communications Act, which bars public safety spectrum from being used for commercial services.

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<sup>&</sup>lt;sup>39</sup> Paul Kirby, "Frontline Fires Back at Cyren Call With 700 MHz Proposal", TRDaily, May 15, 2007.

<sup>&</sup>lt;sup>40</sup> Interview of Reed Hundt, "The Communicators", C-SPAN, aired May 14, 2007.

Section 337(a)(1) of the Communications Act provides that 24 MHz of spectrum between 746 and 806 MHz shall be allocated "for public safety services." <sup>41</sup> The statute goes on to define "public safety services" as "services—(A) the sole or principal purpose of which is to protect the safety of life, health, or property; (B) that are provided—(i) by State or local government entities; or (ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and (C) that are not made commercially available to the public by the provider."

Were the statutory language ambiguous – which it is not – the Commission has clarified that it, indeed, means what it says. In the 700 MHz Public Safety Service Rules proceeding, the Commission found that "[b]ecause the statute defines the public safety services, and not the entities, for which the spectrum is allocated," the relevant question is what services are being offered, rather than who is offering them. <sup>43</sup> The Frontline proposal contemplates use of a portion of the 700 MHz public safety allocation for commercial services, which the statute expressly forbids.

With respect to leasing, the Commission has determined that "public safety licensees" are permitted to "lease their spectrum usage rights to other public safety

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<sup>&</sup>lt;sup>41</sup> 47 U.S.C. § 337(a)(1).

<sup>&</sup>lt;sup>42</sup> *Id.* § 337(f)(1).

<sup>&</sup>lt;sup>43</sup> Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through 2010, First Report and Order, 14 FCC Rcd 152, ¶ 72 (1998) (emphasis added).

entities and entities providing communications in support of public safety operations."<sup>44</sup> However, the Commission has never allowed public safety entities to lease spectrum allocated for their use for commercial purposes.<sup>45</sup> If the statute does not permit commercial leasing by public safety entities, certainly it does not permit a commercial entity like Frontline to lease public safety spectrum for commercial use.

The Frontline Plan Jeopardizes Auction Proceeds. Frontline promises benefits that may never be realized because of a questionable business plan – and in doing so jeopardizes auction proceeds already earmarked for worthy projects including public safety interoperability.

In response to the 9/11 Commission's call for effective, interoperable communications, the DTV Transition and Public Safety Act earmarked \$1 billion in 700 MHz auction proceeds for interoperable equipment grants. 46 Congress designated the proceeds from the auction to various public interest purposes, including up to \$1.5 billion for the DTV converter box program, \$156 million for a national alert and tsunami warning system, 47 and \$43.5 million to advance implementation of E911 service, 48 while the remaining auction proceeds are earmarked for deficit reduction. 49 All this is made

 $<sup>^{44}</sup>$  Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, 19 FCC Rcd 17503  $\P$  53 (2004).

<sup>&</sup>lt;sup>45</sup> See id. (the Commission "decline[d] at this time to permit public safety licensees to enter into spectrum leasing arrangements for commercial or other non-public safety operations").

<sup>46</sup> DTV and Pubic Safety Act, Pub. L. No. 109-171, § 3006, 120 Stat. 4, 24 (2006).

<sup>&</sup>lt;sup>47</sup> *Id.* § 3010.

<sup>&</sup>lt;sup>48</sup> *Id.* § 3011.

<sup>&</sup>lt;sup>49</sup> *Id.* § 3004.

possible by an accompanying requirement that the FCC auction 60 MHz of spectrum for commercial use.<sup>50</sup>

In estimating – and earmarking – the proceeds of the 700 MHz auction, Congress assumed that the spectrum would be made available in a minimally restricted fashion that would enable it to migrate to its highest and best use. The Frontline proposal undermines that assumption by maintaining an auction requirement but conditioning the license grant through an unprecedented "command and control" process in a manner that favors a single entity, so as to significantly de-value the spectrum.

Moreover, should the enterprise fail, the costs of recapturing the spectrum pale in comparison to the lost opportunity costs and the uncertainty that would result for the deployment and operations of the public safety broadband network. These risks are simply too great to take.

The Commission should dismiss the Frontline proposal and promptly adopt sound policies to promote commercial and public safety broadband deployment in the 700 MHz band.

## V. THE COMMISSION SHOULD REJECT OPEN ACCESS FOR THIS SPECTRUM

The Commission seeks comment on proposals by the *Ad Hoc* Public Interest Spectrum Coalition and Media Access Project to impose an "open access" regime – including "the right of a consumer to use any equipment, content, application or service on a non-discriminatory basis" – on at least 30 MHz of the spectrum to be auctioned.<sup>51</sup>

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<sup>&</sup>lt;sup>50</sup> 47 U.S.C. § 337(a).

<sup>&</sup>lt;sup>51</sup> Further Notice ¶ 290.

Ad Hoc's version of "open access" would require 700 MHz licensees to enable any customer to attach "any compatible device" subject to minimal do-no-harm rules and to reach any website, post any information, provide any service and access or provide any application "without degradation, prioritization or interference by the network operator." The Ad Hoc proposal also imposes a wholesale-only business plan with an exception for the provision of retail service through a structurally separate affiliate, subject to further limits if the licensee currently holds spectrum in the market. 53

As an initial matter, this proposal is deeply misguided. As CTIA observed in response to the Skype petition seeking wireless *Carterfone* and "open access" policies, "[t]he record unmistakably shows that exposing wireless networks to untested mobile handsets and applications would degrade network performance, create harmful interference, prevent carrier compliance with important social policy obligations, and open networks to greater security threats."<sup>54</sup> The example of illegally operated, but seemingly "compatible," wireless repeaters demonstrates that unauthorized use of wireless devices can degrade both commercial and public safety communications. <sup>55</sup> Carrier management and certification of phones must be permitted because these steps ensure that network elements work in tandem with handsets to provide the highest quality voice and data services. Moreover, in order to maximize spectral efficiency, carriers must be able to manage the use of applications that require large amounts of bandwidth

<sup>&</sup>lt;sup>52</sup> Ex Parte of Ad Hoc Public Interest Spectrum Coalition, at Appendix, "Open Access Principles for 700 MHz Spectrum" (filed Apr. 5, 2007).

<sup>&</sup>lt;sup>53</sup> *Id*.

<sup>&</sup>lt;sup>54</sup> CTIA Reply Comments, RM-11361, at 2-3 (filed May 15, 2007).

<sup>&</sup>lt;sup>55</sup> CTIA Comments, RM-11361, at 40-41 (filed April 30, 2007).

or near-constant connection to the network, such as streaming media and peer-to-peer services.

There is no economic basis to impose open access or other intrusive forms of regulatory intervention on the wireless industry. Indeed, in light of the competitiveness of the U.S. mobile wireless service and equipment markets, which will only become more competitive as a result of the 700 MHz auction, an "open access" mandate is the very definition of a solution in search of a problem. Professor Thomas Hazlett has noted, "the premises of the *Carterfone* policy – that new rules were required to deal with a rate of return monopoly – are wholly absent in the wireless markets" and "absent monopoly and rate-of-return regulation, market incentives best determine, from the standpoint of consumer welfare, what terms and conditions for network access a carrier offers." The *Ad Hoc* proposals, however, seek to use the Commission's service rules for the 700 MHz band to predetermine the business plan and entities that will prevail in the 700 MHz auction. CTIA firmly believes that the market should determine how best to put this spectrum to use, and the government should refrain from imposing a single business plan – novel and untested – on the 700 MHz spectrum.

In any event, it is indisputable that considering any such requirements in this proceeding is misplaced and premature. The specific open access proposals put forth by *Ad Hoc* is untested and the comment period has just closed on the Skype petition noted above. In addition, the Commission has recently issued the *Broadband Practices Notice* of *Inquiry* that asks numerous questions about market practices and seeks comment on

<sup>&</sup>lt;sup>56</sup> Wireless *Carterfone*: An Economic Analysis by Professor Thomas W. Hazlett, at 8 (attached to Comments of Verizon Wireless, RM-11341 (filed Apr. 30, 2007)).

whether to add a non-discrimination principle to the *Broadband Policy Statement*. To the extent a dialogue on these issues should be opened at all with regard to the competitive wireless industry, the *Broadband Practices Notice of Inquiry* is a more appropriate proceeding to begin developing a record than the 700 MHz service rules *Further Notice*.

As such, the Commission must reject the open access proposal in this proceeding.

#### VI. CONCLUSION

For the reasons discussed above, the Commission should adopt straight-forward, market-oriented rules and conduct the 700 MHz auction promptly to meet the requirements of the DTV Transition and Public Safety Act. CTIA urges the Commission to reject the four proposals – geographic buildout; eligibility restrictions; Frontline; and open access – that threaten to undermine the success of the auction and service deployment in the 700 MHz band. Instead, the Commission should move ahead with its market-oriented rules that have contributed to the success of the wireless marketplace today.

Respectfully submitted,

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